

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1. (Currently Amended) A surgical ablation instrument comprising:
a housing having a longitudinal lumen, the distal end of the housing being sufficiently flexible to be bent into a loop configuration;
an ablation element disposable within the lumen of the housing and having a light transmission surface for transmitting light energy to ablate tissue at a target site; and
a fluid channel within the housing for introducing fluid to the ablation element during delivery of the ablation energy;
wherein the light transmission surface is disposed adjacent a portion of the housing that is impermeable to the fluid and the light transmission surface is movable with respect to the impermeable portion of the housing to ablate the tissue therethrough.
2. (Original) The instrument of claim 1, wherein the fluid is delivered between the ablation element and the housing.
3. (Original) The instrument of claim 1, wherein the housing further includes a handle portion at a proximal end.
4. (Original) The instrument of claim 3, wherein the handle portion includes a fluid inflow port and a fluid carrying lumen for delivering the fluid to the housing.
5. (Original) The instrument of claim 1, wherein the distal end of the housing includes a fluid outflow port for release of the fluid.

6. (Original) The instrument of claim 1, wherein the fluid comprises a material which cools the ablation element during delivery of ablative energy.
7. (Original) The instrument of claim 1, wherein the fluid is a lubricating fluid.
8. (Original) The instrument of claim 1, wherein the fluid comprises a physiologically compatible fluid.
9. (Original) The instrument of claim 8, wherein the fluid is saline.
10. (Currently Amended) A method for ablating a target tissue, comprising the steps of:
providing a surgical ablation instrument comprising a housing having a proximal end, a distal end and a longitudinal lumen extending therebetween, the distal end of the housing being sufficiently flexible to be bent into a loop configuration, an ablation element disposed within the lumen of the housing and having a light transmission surface for transmitting light energy to ablate tissue at a target site, and a fluid channel within the housing for introducing fluid to the ablation element during delivery of the ablation energy;
wherein the light transmission surface is disposed adjacent a portion of the housing that is impermeable to the fluid and the light transmission surface is movable with respect to the impermeable portion of the housing;
positioning the surgical ablation instrument proximate to a predetermined tissue site,
wherein the impermeable portion of the housing is between the light transmission surface and the target tissue;
positioning the ablation element within the lumen of the housing; and
transmitting light ablative energy through the impermeable portion of the housing, such that said target tissue is ablated, coagulated or phototherapeutically modulated without damaging surrounding tissue.
11. (Original) The method of claim 10, further comprising the step of introducing a fluid between the ablation element and the housing during the energy delivery.

12. (Original) The method of claim 11, wherein the fluid comprises a material which cools the ablation element, and the step of introducing a fluid cools the ablation element during delivery of the ablative energy.

13. (Original) The method of claim 11, wherein the fluid comprises a lubricating fluid, and the step of introducing a fluid lubricates the ablation element during delivery of the ablative energy.

14. (Original) The method of claim 11, further comprising the step of irrigating the target site by releasing the fluid from the housing into the target site.

15. (Original) The method of claim 10, further comprising the step of repeating the steps of positioning and delivering until a composite lesion of a desired shape is formed.

16. (Original) The method of claim 10, wherein the target site is cardiac tissue.

17. (Currently Amended) A method for ablating a target tissue, comprising the steps of:
providing a surgical epicardial ablation instrument comprising a housing having a proximal end, a distal end and a longitudinal lumen extending therebetween, the distal end of the housing being sufficiently flexible to be bent into a loop configuration, an ablation element disposed within the lumen of the housing for transmitting light energy to ablate tissue at a target site, and a fluid channel within the housing for introducing fluid to the ablation element during delivery of the ablation energy;

wherein the ablation element is disposed within a portion of the housing that has optical properties selected to transmit at least a portion of the light energy' and the ablation element is movable with respect to the portion of the housing;

positioning the surgical epicardial ablation instrument proximate to a predetermined tissue site;

positioning the ablation element within the lumen of the housing; and

transmitting light ablative energy through the portion of the housing while moving the ablation element with respect to the portion of the housing, such that said target tissue is ablated, coagulated or phototherapeutically modulated without damaging surrounding tissue.